

(19) World Intellectual Property  
Organization  
International Bureau



547 840

(43) International Publication Date  
16 September 2004 (16.09.2004)

PCT

(10) International Publication Number  
**WO 2004/078729 A1**

(51) International Patent Classification<sup>7</sup>: **C07D 213/79**,  
213/80, 405/12, 409/12, 401/12, 413/12, 417/12, 401/06,  
401/08, 417/06, 417/08, 413/06, 413/08

(74) Common Representative: **SYNGENTA PARTICIPATIONS AG**; Intellectual Property, P.O. Box, 4002 Basel (CH).

(21) International Application Number:  
PCT/EP2004/002291

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 5 March 2004 (05.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
373/03 7 March 2003 (07.03.2003) CH

(71) Applicant (*for all designated States except US*): **SYNGENTA PARTICIPATIONS AG** [CH/CH]; Schwarzwaldallee 215, CH-4058\_Basel (CH).

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

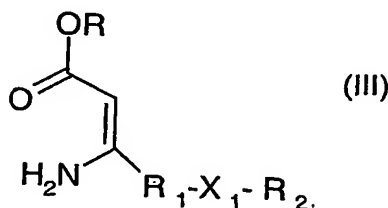
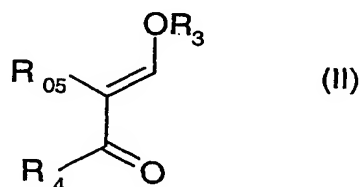
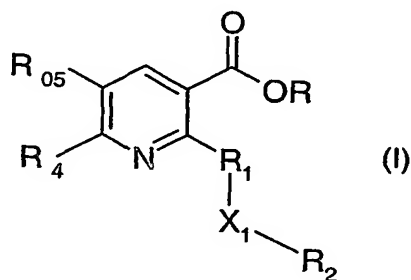
(75) Inventors/Applicants (*for US only*): **JACKSON, David, Anthony** [GB/CH]; Syngenta Corp Protection Muenchwilten AG, Breitenloh 5, CH-Muenchwilten (CH). **BOWDEN, Martin, Charles** [GB/GB]; Syngenta Huddersfield Works, Leeds Road, Huddersfield, West Yorkshire, HD2 1FF (GB).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: PROCESS FOR THE PRODUCTION OF SUBSTITUTED NICOTINIC ACID ESTERS



(57) Abstract: The present invention relates to a process for the preparation of compounds of formula (I) wherein the substituents are as defined in claim 1, by reaction of a compound of formula (II) wherein R<sub>3</sub> is C<sub>1</sub>-C<sub>8</sub>alkyl or C<sub>3</sub>-C<sub>6</sub>cycloalkyl and R<sub>4</sub> and R<sub>05</sub> are as defined for formula (I), with a compound of formula (III) wherein R, R<sub>1</sub>, R<sub>2</sub> and X<sub>1</sub>, are as defined for formula (I) in claim 1, in an inert solvent in the presence of a proton source.



---

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*